

Appl. No. 10/020,334

Amendment dated April 30, 2004

Reply to Office Action of February 13, 2004

Remarks/Arguments

Claims 1-30 are pending and stand rejected on varying grounds under §102(b) and 103(a). Claims 7, 11 and 26 have been rejected based on §112, 2nd paragraph. In addition the Examiner has objected to the specification. Claims 1, 11, 13, 23, 25 and 26 have been amended to further clarify the claimed subject matter. Claims 26, 27, and 29 have been amended to correct clerical errors and change their respective dependency to claim 25. No new matter has been added by any of the amendments to the specification or claims. In view of the comments below, Applicant believes the rejections have been overcome and respectfully requests that the Examiner reconsider the present application including claims 1-30 and withdraw the rejection of these claims.

- a) Applicant notes with appreciation that the drawings have been accepted and that the Examiner has considered the art listed on and returned an initialed copy of Form 1449.
- b) The specification is objected to for various clerical errors and use of acronyms that were not properly defined. In view of the amendments to the specification as recited above, Applicant respectfully submits that this objection has been traversed and respectfully requests that the Examiner reconsider and withdraw the objections to the specification.

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c) Claims 7, 11, and 26 stand rejected under 35 U.S.C. §112, 2nd paragraph as being indefinite.

Claim 7 is rejected due to the use of the term "low" as in "low intermediate frequency receiver". Applicant respectfully disagrees with the Examiner's contention that this use of low is indefinite. Low intermediate frequency receiver is a term used in the art as in low-IF receivers. As noted in the specification, "The zero or low IF frequency receiver is a form of SH receiver, wherein the carrier frequency is translated to or near to a zero IF frequency signal" (see page 15, lines 8-10). Applicant has also enclosed copies of two references (note there are many references available) from the mid to late nineties that further demonstrate that this is a term understood in the art. The following article and book are just two of the many references on low-IF receivers that show that one of ordinary skill in the art would be aware of the terminology that has been used in claim 7.

J. Crols, and M.S.J. Steyaert, "A single-chip 900 MHz CMOS receiver front-end with a high performance low-IF topology," *IEEE Journal of Solid-State Circuits*, Volume 30, Issue 12, December 1995, pp. 1483-1492.

Jan Crols and Michiel Steyaert, *CMOS Wireless Transceiver Design*. Boston: Kluwer Academic Publishers. 1997. pp. 54-61.

Generally speaking and solely for the Examiner's information/amusement, the term, "low-IF receiver" refers to a specific type of receiver architecture in which the incoming signal is mixed via a complex mixer to an intermediate frequency having a value of approximately once to twice the bandwidth of the desired signal, e.g. near zero frequency for a narrow bandwidth signal. The image (mirror) signal is then typically removed from the desired signal via complex signal processing.

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Thus in view of the specification and state of the art at the time the application was filed Applicant respectfully submits that low intermediate frequency receiver is understood by those of ordinary skill in the field and thus is not indefinite as used in claim 7. Hence, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claim 7 under 35 U.S.C. 112, 2nd paragraph.

Claim 11 and 26 are rejected due to the use of the phrase "on the order of" as in "expected battery life is on the order of a shelf life for a battery". While the Examiner appears to appreciate the claimed subject matter, he nevertheless considers the terminology to be indefinite. The Oxford English Dictionary defines "of the order of" as having a ratio that is neither a large number nor a small fraction. Applicant has amended claim 11 and 26 and replaced [on the order of] with substantially equal to, thus further clarifying claims 11 and 26. Therefore in view of the amendments to the claims, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claim 11 and 26 under 35 U.S.C. 112, 2nd paragraph.

Claim 26 is rejected for improper antecedent basis for "said transmitter" and a clerical error in "shelf life." Applicant has amended claim 26 to depend from claim 25 and establish proper antecedent basis and further has amended "shelf like" to read "shelf life." Applicant thus believes this rejection has been traversed and respectfully requests that the Examiner reconsider and withdraw the rejection of claim 26 on these grounds.

d) Claims 1, 6-8, 10, 11, 13, 18-20, 22, and 23 stand rejected under 35 U.S.C. 102(b) as being anticipated by Siwiak et al. (U.S. Patent No. 5,239,306) (Siwiak).

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Regarding claim 1, the Examiner maintains that Siwiak teaches a selective call communications unit arranged and constructed for extended battery life as variously defined by Applicant's claims noted above. In particular the Examiner curiously construes Siwiak's (single) receiver 102 coupled to two different demodulators 108, 112 as the two different receivers as claimed by applicant. Applicant respectfully disagrees that Siwiak is subject to a good faith construction such as the Examiner has proposed.

Siwiak consistently describes his invention as a "dual mode communication receiver" in the spec (e.g., title, abstract, col. 2, line 12 et sequence, Description of the Drawings, Description of the Preferred Embodiments, etc.) and all the claims. Siwiak teaches or suggests a single receiver, with switchable demodulators—see element 102 in FIGs. 1, 3 and 4, and especially FIG. 2C, which shows separate power signals for the receiver and the two demodulators. The Siwiak disclosure and claims describe and define "a dual mode communications receiver" for receiving information in two "modulation formats." The exemplary receiver of Siwiak is a super heterodyne and this super heterodyne receiver 102 is used to receive signals with either of two modulation formats (FM or Linear), where these signals are demodulated by distinct demodulators 108, 112.

Siwiak along with virtually countless other references recognizes the importance of power savings, e.g. battery life in some fields. Siwiak further indicates that some protocols, such as linear protocols, result in more power consumption than others. Siwiak shows or suggests that this difference is due to the demodulators as that is the only function that is changed between the different received signals. Applicant's invention concerns an even greater savings in power

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consumption that is available by using different receivers, such as superregenerative and superheterodyne receivers.

Applicant has amended independent claim 1, and 13, (as well as 25) to recite a "messaging receiver different than the first receiver" to further clarify that these receivers are two distinct receivers rather than the single receiver of Siwiak where the Siwiak receiver is coupled to alternative demodulators. Siwiak does not show or suggest the claimed two receivers and in fact teaches using one receiver with alternative demodulators. Given that Siwiak only shows one receiver, this reference can not be used to show or suggest the enable signal provided by one receiver enabling a second receiver. For these reasons, this reference does not support a §102(b) rejection of claims 1, or 13 (or 25 as noted below). Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 1 and 13 under 35 U.S.C. 102(b) based on Siwiak et al. (U.S. Patent No. 5,239,306).

Claims 6-8, 10, and 11 depend from claim 1 and claims 18-20, 22, and 23 depend from claim 13. Claims 1 and 13 are believed to be allowable over the Siwiak reference and thus at least by virtue of dependency on an allowable claim, claims 6-8, 10, 11, 18-20, 22, and 23 should likewise be allowable. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 6-8, 10, 11, 18-20, 22, and 23 under 35 U.S.C. 102(b) based on Siwiak et al. (U.S. Patent No. 5,239,306).

Furthermore claim 11 and 23 either as originally presented or as amended where the battery life is nearly equal to a shelf life of a battery as claimed is not shown or suggested by Siwiak. Thus and for this additional reason, Applicant respectfully requests that the Examiner

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reconsider and withdraw this rejection of claim 11 and 23 under 35 U.S.C. 102(b) based on Siwiak et al. (U.S. Patent No. 5,239,306).

e) Claims 2-5, 9, 12, 14-17, 21, 24 and 27-30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Siwiak in view of applicant's admitted prior art.

Claims 2-5, 9 and 12 depend from claim 1. Claims 14-17, 21 and 24 depend from claim 13. Claims 27-30 depend from claim 25. Each of these independent claims is believed to be allowable over the Siwiak reference for at least the reasons noted above, e.g. Siwiak does not show or suggest the respective limitations of the claims. Any material discussed by Applicant does not change the basic issue, namely that the claims are not shown or suggested by this material in combination with Siwiak, and thus the independent claims are still believed to be allowable. Thus at least by virtue of dependency on an allowable claim, claims 2-5, 9, 12, 14-17, 21, 24 and 27-30 should likewise be allowable. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claims 2-5, 9, 12, 14-17, 21, 24 and 27-30 under 35 U.S.C. 103(a) based on Siwiak et al. (U.S. Patent No. 5,239,306) in view of applicant's admitted prior art.

f) Claims 25 and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Siwiak in view of Morelli (US Patent No. 5,838,720) (Morelli). Claim 25 has been amended as noted above and thus is not anticipated by Siwiak in combination with Morelli even if it is assumed that Morelli shows or suggests the claimed transmitter element of claim 25. Claim 26

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depends from claim 25. Since this combination of references does not show or suggest the limitations of claim 25 they do not support a §102(b) rejection of this claim. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw this rejection of claim 25 and by virtue of dependency claim 26 under U.S.C. 103(a) based on Siwiak in view of Morelli (US Patent No. 5,838,720).

Accordingly, Applicant respectfully submits that the claims, as amended, clearly and patentably distinguish over the cited reference of record and as such are to be deemed allowable. Such allowance is hereby earnestly and respectfully solicited at an early date. If the Examiner has any suggestions or comments or questions, calls are welcomed at the phone number below.

Although it is not anticipated that any fees are due or payable, the Commissioner is hereby authorized to charge any fees that may be required to Deposit Account No. 50-1147.

Respectfully submitted,

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Attachments

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